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TRADE, ENVIRONMENT AND DEVELOPMENT
ASPECTS OF ESTABLISHING AND OPERATING ECO-LABELLING PROGRAMMES

Report by the UNCTAD secretariat

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Executive Summary

1. In accordance with its terms of reference, the Ad Hoc Working Group on Trade, Environment and Development is, inter alia, examining international cooperation on eco-labelling. The Group initiated its deliberations on the subject at its first session, held from 28 November to 2 December 1994, focusing on (i) a comparative analysis of current and planned schemes and a discussion of concepts such as mutual recognition and equivalencies; and (ii) an examination of the possibilities for taking into account the interests of developing countries in the elaboration of eco-labelling criteria. Discussions were aided by the secretariat's report TD/B/WG.6/2 on "Eco-labelling and market opportunities for environmentally friendly products".[1] The Working Group decided to continue its deliberations at its second session with an examination of the "trade, environment and development aspects of establishing and operating eco-labelling programmes".

2. Building on the analysis presented in report TD/B/WG.6/2 and the discussions at the first session, Chapter I examines the trade effects of eco-labelling. The point is made that when eco-labelling is an important factor in the marketplace, its effects may be similar to those of regulatory measures. The trade effects then depend on the product coverage of eco-labelling programmes, compliance costs and possible discriminatory effects against foreign producers. In some cases, eco-labelling while not affecting the traded products themselves, may nevertheless affect the trade in inputs.

3. The environmental effects of eco-labelling (Chapter II) depend on the relevance and significance of eco-labelling criteria as well as the quantity of eco-labelled products. Eco-labelling can only be an effective marketing instrument for environmental purposes if there is public awareness of eco-labelling programmes and eco-labelled products and producers are interested in making a significant volume of eco-labelled products available in the marketplace. Experience shows that the success of eco-labelling programmes in terms of number of products using eco-labels and market shares of eco-labelled products is mixed. As far as eco-labelling in developing countries is concerned, since the domestic market for environment-friendly products tends to be small, eco-labels will only have significant effects if adjustments made to qualify for the label also contribute to increased export competitiveness.

4. With regard to the developmental effects of eco-labelling (Chapter III), the major concern is that adverse effects of eco-labelling on the exports of developing countries are likely to have some negative impact on their development process. Complying with eco-labelling criteria may be costly for firms in developing countries, in particular firms in least developed countries and small and for medium-sized enterprises. In the selection of product categories for eco-labelling and in the determination of criteria it is therefore important to consider the effects of eco-labelling on developing countries, in particular the least developed among them. Eco-labelling is not meant to be and cannot be primarily an instrument of development of developing countries.

5. Chapter IV examines a number of the issues raised in the report on the basis of a number of case studies covering three sectors of export interest to developing countries: paper, textiles and clothing and footwear. In all these sectors, whether or not a product qualifies for an eco-label depends to a large extent on the materials used, and many of the corresponding criteria are related to processes and production methods (PPMs). For example, eco-labelling criteria for shoes include process-related criteria related to leather tanning. Most sectoral studies point out that meeting the eco-criteria for certain products would have significant effects on competitiveness, particularly for small firms.

6. Chapter V suggests ways and means to take account of developing countries' interests in eco-labelling. It further elaborates proposals made in report TD/B/WG.6/2, in particular with regard to issues such as transparency and the application of PPM-related criteria to imported products, taking into account

the deliberations at the first session of the working group as well as additional analysis by the secretariat. The point is made that while eco-labelling may be a fairly transparent process at the domestic level, it appears to lack transparency when eco-labelling involves products which are of substantial export interest to foreign producers. Chapter V.A examines possible parameters which could assist eco-labelling bodies in identifying product categories of special export interest to developing countries. The point is made that full transparency would imply that in addition to the manufacturers of products subject to eco-labelling the suppliers of materials also be involved in the process of establishing criteria.

7. Progress has been made in ISO in designing draft guiding principles aimed at ensuring the credibility and non-discriminatory nature of eco-labelling. A number of questions, however, continue to cause concern, such as the relationship between eco-labelling and the provisions of the multilateral trading system, in particular the Agreement on Technical Barriers to Trade (an issue included in the terms of reference of the WTO Committee on Trade and Environment); the transaction costs arising from the coexistence of different eco-labelling schemes; and the application of PPM-related criteria to imported products. It has also been pointed out in the report that when a product is mostly imported, e.g textiles and footwear, devising eco-labelling for such products should be treated with caution. Particular care should be exercised if the criteria for such products are PPM-based. Concepts such as mutual recognition and "equivalency" need further analysis.

I. TRADE EFFECTS OF ECO-LABELLING

8. At the time of drafting this report, no developing-country producer was using a "type-I" eco-label (eco-labels awarded by a third party for products which meet preset environmental criteria)[2] to market his products in any OECD country. Although data on refused applications are not available, it is likely that developing country producers have not yet applied for such labels. Producers in developing countries may nevertheless have been affected in two ways. First, eco-labelling may have reduced the competitiveness of unlabelled products in a particular market. It has been reported, for example, that Norway's imports of fine paper originating in Brazil declined significantly after the introduction of an eco-label[3]. Second, eco-labelling may have had effects on suppliers of materials used to manufacture eco-labelled products. It is difficult to know whether such effects have already taken place. However, the major concern of Brazilian exporters of pulp with a recently introduced European Union eco-label on tissue paper referred precisely to such indirect effects. And eco-labelling in footwear could have effects on leather tanneries in developing countries.[4]

9. The possible trade effects of eco-labelling have been analysed in detail in document TD/B/WG.6/2. Eco-labelling promotes product differentiation on the basis of environmental quality and may thus have effects on competitiveness. Since eco-labelling is voluntary, exporting firms have the option of either applying for the label (focusing competitiveness on non-price factors) or to continue selling unlabelled products (focusing competitiveness on price factors). However, when eco-labelling is an important factor in the marketplace, its effects may be similar to those of mandatory regulations. In such cases eco-labelling may involve market access questions, in particular when it is perceived to discriminate against foreign producers.

10. Eco-labelling in the developed countries might allow developing country producers to obtain price premiums which may not be available in their home market. A key question is whether targeting a potential market niche for eco-labelled products could allow firms to recover -through price premiums and/or increased market shares- the costs involved in adjusting their production processes and in securing materials that comply with the eco-labelling criteria. As will be pointed out in Chapter II, at times consumers may not respond to eco-labelling and price premiums may be difficult to obtain. It follows that incurring additional costs with a view to obtaining eco-labels may involve a certain economic risk.

A. Product coverage of eco-labelling schemes

11. Eco-labelling programmes cover a variety of product categories. Some of these categories, such as paper products, detergents, batteries, paints and certain household appliances, are covered by various programmes. Many product categories are selected on the basis of their relevance at the disposal stage and/or their potential contribution to recycling. There are other reasons why certain product categories may spread across programmes. For example, the success -in terms of producers' response- of eco-labelling in specific product categories, may induce other programmes to include similar product categories. An analysis of the product categories earmarked for eco-labelling also indicates that developing countries are becoming more exposed to the effects of eco-labelling programmes in developed countries, in particular in the European Union. Mainly as a result of the proposed eco-labels for textiles (cotton T-shirts and bed linen) and shoes, as much as 45 per cent of value of imports in product categories earmarked for eco-labelling in the European Union originates in developing countries and China.[5]

B. Possible discriminatory effects

12. Although the criteria for granting labels are the same for domestic and

foreign suppliers, eco-labelling may de facto discriminate against foreign producers. To some extent, difficulties encountered by foreign suppliers in obtaining an eco-label represent the normal disadvantages of the exporter versus the domestic producer. However, certain aspects of eco-labelling, such as the cradle-to-grave approach, add to its potentially discriminatory effects, in particular against producers in developing countries. Possible discriminatory effects can be attributed to a number of factors:

(a) Eco-labelling tends to be based on domestic environmental priorities and technologies in the importing country and may overlook acceptable products and manufacturing processes in the country of production. Eco-labelling criteria often lack flexibility to reflect relevant local environmental conditions and priorities in the country of production;

(b) The definition of product categories, and the determination of criteria and limit values may favour domestic over foreign producers. Eco-labelling criteria may be specified in terms of technology to which domestic firms have easier access;

(c) Eco-labelling may require foreign producers to meet criteria which are not relevant in the country of production.[6] Thus, technologies which have been developed to deal with pollutants which are important in the importing country, but less important in the country of production, would need to be imported if a firm wishes to qualify for a label.[7]

(d) Environmental infrastructures may differ widely across countries (e.g. municipal waste water treatment plants; solid waste treatment plants; recycling stations);[8]

(e) Ensuring supplies of chemicals and other materials which are acceptable for use in eco-labelled products may be difficult for foreign producers, in particular in developing countries. Foreign suppliers of inputs to eco-labelled products may also be discriminated against;

(f) Certain parameters used to calculate the environmental effects of products throughout their life-cycle may be based on information collected in the importing country or countries with comparable environmental conditions, and may overestimate environmental impacts in the country of production. For example, parameters used to estimate the energy used in the manufacturing of products may not reflect the conditions in the country of production.

C. Compliance costs and export competitiveness of developing-country producers

13. Eco-labelling programmes of the developed countries have only recently started to include products of significant export interest to developing countries and products from developing countries have not as yet used type-I eco-labels. Therefore, no empirical data are available on the costs of compliance to developing country producers. However, a number of case studies, carried out by research teams in developing countries under a technical cooperation project sponsored by IDRC, indicate that the costs of adjustment for firms that wish to comply with eco-labelling criteria might be significant. The costs involved in the use of specific chemicals and other raw materials, capital investment, as well as testing and verification would be particularly relevant. Designing and producing a product that complies with eco-criteria may be particularly costly for small-scale producers (see Chapter III). In addition, process-related criteria, which tend to be based on environmental and technological conditions in the importing country, may imply high costs for foreign producers. Other cost

factors are license fees (See also report TD/B/WG.6/2, paragraphs 34-41).

D. Eco-labelling and international trade rules

14. Strengthened international cooperation and increased transparency are of key importance in avoiding or mitigating possible adverse trade effects of eco-labelling. An important question in this context is the relationship of eco-labelling with the WTO, in particular the Agreement on Technical Barriers to Trade (TBT).

15. Contrary to what is often argued, the fact that eco-labelling is a voluntary instrument or is implemented by non-governmental bodies does not by itself mean that eco-labelling would not be covered by the TBT Agreement. Voluntary standards implemented either by central government, local government, non-governmental or regional bodies are in fact covered by the Code of Good Practice for the Preparation, Adoption and Application of Standards (Annex 2 to the TBT Agreement). The use of criteria regarding PPMs which are not related to the (eco-labelled) product may be critical in the context of the relationship between eco-labelling and the WTO rules.

II. ENVIRONMENTAL EFFECTS OF ECO-LABELLING

A. Introduction

16. Concern for the environmental impacts of products has grown in recent years, in particular in the developed countries. Traditionally, product-oriented environmental policies focused on one stage of the product's life cycle, normally the use or disposal stage, and one particular environmental aspect (e.g. a single substance contained in the product). Technical standards and regulations were often the preferred instruments to implement such policies.

17. Product-specific environmental policies are increasingly aimed at promoting patterns of consumption that reduce environmental stress. Agenda 21 recognized that "developed countries should take the lead in achieving sustainable consumption patterns".[9] The purpose of "product policies" is to encourage producers, retailers and consumers to continuously reduce the environmental impacts of products.[10] The scope of product-specific environmental policy-making is widening and increasingly covers multiple environmental aspects, including aspects related to "sustainable development" as well as different stages of the product's life cycle. Product policies aim, for example, at reducing the amount of energy and materials contained in products, minimizing waste, eliminating hazardous substances, promoting reuse and recyclability, and prolonging the time of usage of the product. These policies use a broad mix of instruments, including regulatory measures, market-based instruments, and information-based instruments, many of which are voluntary, such as eco-labelling. Measures which inform and educate the consumer about a product's environmental advantage can create demand pressure that may lead to innovation, thus both complementing and substituting for regulation. Consumer information approaches encourage innovation both by not limiting flexibility in responding to environmental concerns and giving companies an incentive to exceed current standards.[11]

18. Product-oriented policies targeting consumer products receive high priority in a number of developed countries. Consumer preferences for environment-friendly products, the availability of environmental infrastructure and state of the art technologies may facilitate the effective use of product policies aimed at reducing environmental stress. In a number of cases product-specific policies have proven to be successful. For example, in the Netherlands more than 95 per cent of detergents have been phosphate-free since 1990, largely as a result of a covenant.[12] With regard to eco-labelling, in the case of the German Blue Angel programme, it has been reported that a few years after the introduction of eco-labels for oil and gas heating appliances, emissions of sulphur dioxide, carbon monoxide, and nitrogen oxides were reduced by more than 30 per cent and that the energy efficiency of these appliances had improved significantly. Also, after the introduction of an eco-label, the market share of low-solvent paints and varnishes went up from 1 per cent to 50 per cent while the amount of solvents released into the environment were estimated to have been reduced by some 40,000 tons.[13]

19. In developing countries, product policies could be less effective as an environmental policy instrument. This is beacause domestic demand for environment-friendly products is weak, environmental infrastructure is generally poor and there is a large informal sector. Environmental conditions and priorities in developing countries are different from those in developed countries. For example, priorities may have to be given to investment in basic infrastructure.

20. How effective eco-labelling has already been in reducing environmental stress is difficult to know. The UNCTAD secretariat is not aware of any study which has tried to make a systematic assessment of the effects of existing eco-labelling programmes on the environment. What can be said is that the environmental effects of eco-labelling depend largely on the relevance and significance of eco-labelling criteria as well as the market share of eco-

labelled products, which in turn depends on consumer'preferences for eco-labelled products and the responsiveness of producers and suppliers. Thus in order for eco-labelling to be an effective marketing instrument, there must be public awareness of eco-labelling programmes and eco-labelled products, and producers must be interested in making a significant volume of eco-labelled products available in the marketplace.

B. Setting eco-labelling criteria

21. Eco-labelling programmes differ considerably among each other in terms of stringency and coverage of criteria as well as in the use of Life Cycle Analysis (LCA). Credibility of eco-labelling programmes may imply the need to set stringent criteria. However, there may be a trade-off between stringent criteria, which may spur technological innovation, and criteria which are easier to meet, which may help in making eco-labelling more visible.

22. In principle eco-labelling follows a comprehensive, multi-criteria and life cycle approach to ensure that an eco-label informs the consumer about a real reduction of environmental stress and not merely a transfer of impacts across environmental media or stages of the product's life cycle. In practice, however, criteria may refer to only one or some environmental aspects and only part of the product's life cycle. For example, the German Environmental Agency argues that an assessment of most product groups shows that one specific environmental aspect dominates.[14] The Japanese eco-labelling programmes also focus on only one environmental aspect, which is normally related to the use and disposal stages of a product's life cycle (see TD/B/WG.6/2, box 4).

23. LCA may raise conceptual and practical problems, particularly when the product's life cycle involves several countries which may differ significantly in terms of environmental conditions and priorities. This is in particular the case of criteria relating to "upstream" environmental effects such as the extraction of raw materials, as well as Process and Production Methods (PPMs). At the first session of the Working Group, it was felt that eco-labelling systems may have to accept variations in PPM-based criteria across countries in accordance with carrying capacities and social preferences. Moreover, it was stressed that the use of process-related criteria could raise issues of extra-territorial application of the environmental priorities of the importing country[15]. Some suggestions to deal with the PPM issue are made in Chapter V (section C).

1. PPMs, imported products and the consumer

24. To the extent that environmental effects are intrinsically local, the environment of the importing country is not affected by the PPMs used in the other countries: such PPMs only affect the local environment in the country of production. The rationale which is often given for applying PPM-related criteria to imported products is (i) to provide information to consumers who are concerned about the environmental effects of the products they consume, wherever such effects occur, and to safeguard the credibility of the programme; and (ii) to avoid competitive distortions which are alleged to arise if domestic producers were to be forced to comply with more stringent criteria than their foreign competitors in order to obtain the label.

25. One of the objectives of eco-labelling is to provide information to consumers. But an eco-label, as currently constructed, only informs the consumer that a product complies with the criteria and thresholds determined by the eco-labelling programme in the importing country. Where those criteria overlook environmentally acceptable PPMs in the country of production or are inappropriate or irrelevant in the context of local conditions in the producing country, eco-labels fail to provide relevant information to the consumer[16].

26. In addition, the relevant information that a consumer would be interested

in receiving generally refers to ambient environmental quality. It is widely accepted that ambient standards may reflect differences in absorption capacities and "critical loads". Eco-labelling criteria, however, tend to be based on emission or technology standards, which are rather inflexible, and ignore that even if two countries would aim at the same ambient standards, it would be legitimate for countries with relatively more environmental resources and/or relatively lower environmental pressure, to apply less stringent emission standards.[17] The use of specific PPM-related criteria in eco-labelling, as currently constructed, seems to ignore these widely accepted concepts.

2. Eco-labelling criteria addressing global environmental problems

27. A number of the problems outlined in the previous section would in principle not arise in the case where eco-labelling requirements include PPM-related criteria related to global environmental problems. It should be noted, however, that there may be certain disadvantages in including such criteria in eco-labelling. Criteria which are established unilaterally by the eco-labelling programme of the importing country may not take account of internationally-agreed targets set for different groups of countries in the context of Multilateral Environmental Agreements (MEAs). Such targets are negotiated by governments and may vary among groups of countries, taking into account the common but differentiated responsibilities of all countries for global environmental problems.

28. Whereas MEAs tend to set rights and obligations at the country level, eco-labels are granted to products. In one case study the point is made that it might be inappropriate to deny the right to use an eco-label to a particular company, based on uniform eco-labelling criteria of the programme of the importing country, if the country of production complies with internationally agreed targets.[18]

29. In other cases, however, eco-labelling may contribute to achieving internationally-agreed objectives, provided that the eco-labelling criteria are based on an international process. A case in point is eco-labelling in the timber sector. One study found that eco-labelling in timber may assist in re-establishing eroded markets for tropical timber and tropical timber products[19].

C. Market shares of eco-labelled products

30. Setting relevant eco-labelling criteria by itself does not guarantee environmental improvements. Eco-labelling can only have environmental effects to the extent that eco-labelled products gain a significant share of the market. It should also be considered that at times stringent eco-labelling criteria may induce only minor environmental effects because of limitations in supply possibilities. For example, it may be technically difficult to produce significant quantities of "eco-garments" due to the limited supply of organically grown cotton and environment-friendly dyes.

1. Consumer preferences for eco-labelled products

31. Eco-labelling programmes are becoming increasingly known among consumers. For example, opinion polls conducted in 1993 indicate that 53 per cent of the consumers in Japan knew the EcoMark, as compared to 22 per cent in 1990. A survey carried out in Singapore in March 1994 showed that more than half of the population recognized the GreenLabel mark. In Canada, awareness for the national Eco-logo increased to 51 per cent in 1993 from 19 per cent in 1990 and in Norway the recognition of the White Swan increased from 12 per cent in 1992 to 66 per cent in 1994.[20] However, consumer preferences for eco-labelled products as well as their willingness to pay premiums tend to vary widely from product to product. Consumer polls indicate that many consumers declare that they are willing to pay a premium for environment-friendly products. However, there may be discrepancies between expressed willingness and actual purchasing behaviour.

Box 1
Number of product categories and of products under different eco-labelling programmes

February/March 1995

	Product categories for which criteria are established	Eco-labels granted			
		Prod. categ	Manu-facturers	of which foreign	Pro-ducts
Canada	31	15	116	17	1,500
EU	5	1	1	-	8
Germany 1/	81	61	1,058	175	4,353
Japan	65	63	1,039	22	2,322
Netherlands 2/	20	4	10	3	40
Nordic cntrs	31	15	182	19	

1/ Germany: By 2 March 1995, eco-labelling criteria had been established for 81 product categories. Criteria were under development for another 34 product categories.

2/ Netherlands: By 20 February 1995 eco-labels had been granted to four product categories. This number is expected to increase to seven by June 1995.

Source: UNCTAD

2. Government procurement

32. Apart from consumers, institutional buyers, including governments, constitute a potential market for eco-labelled products. The inclusion of environmental considerations in public procurement is encouraged in a number of OECD countries,[21] although in general eco-labelled products are not favoured explicitly.[22] For example, in Canada, the Code of Environmental Stewardship is intended to help federal agencies to incorporate environmental considerations into their practices and operations, including with regard to purchasing goods and services, but the Code is not explicit in its support to Canada's Environmental Choice Programme (ECP). Supply and Services Canada (SSC), the federal government's purchasing authority, buys environment-friendly products, but bases its decisions on commercial considerations. Municipalities may be more explicit in their preference for eco-labelled products. In 1990, the Association of Canadian Cities for Environmentally Sound Strategies (ACCESS), which represents municipalities across Canada, recognized the ECP as the only available mechanism to ensure that products meet environmentally sound standards. As a result, municipal purchasing officers try as far as possible to obtain products that carry the ECP EcoLogo (depending on availability and prices)[23]. In Sweden, several municipalities have autonomously decided that the health and environmental aspects of the products play a key role in their purchasing decisions.

3. Producers' response to eco-labelling

33. Experience shows that it may be difficult to implement eco-labelling

programmes which are successful in terms of producers' response. For example, Canada's Environmental Choice Programme (ECP) has developed criteria for 31 product categories, but eco-labels are being used in only 15 of these categories (see Box 1). And a large part of ECP's licensing revenues were derived from only two product categories: paint and fine paper. ECP has now established an action plan aimed at increasing the presence of eco-labelled products in the marketplace[24].

34. The more successful programmes in terms of number of products using eco-labels are the German "Blue Angel" and the Japanese EcoMark[25]. However, eco-labels are more frequently used in some product categories than in others. For example, approximately half of the eco-labelled products in Germany belong to only a few categories, especially low pollutant coatings, recycled paper products and recycled cardboard products.

35. Producers obtain direct economic benefits from eco-labelling if the use of eco-labels results in increased sales revenues (by increasing market shares and/or obtaining price premiums) in excess of the costs incurred in obtaining the eco-label (the costs of adjustments needed to produce products which qualify for the eco-label, in addition to the costs of testing and fees paid for using the label). Surveys conducted among licensees on the effects of eco-labelling on sales show mixed results. For example, in Canada, a survey conducted in 1993 revealed that 62 per cent of the licensees did not attribute any change in sales to using the EcoLogo, while 33 per cent attributed an increase in sales to the EcoLogo[26]. On the other hand, it appeared that companies which did not use the eco-label had not lost market share. In a survey conducted in Singapore, 15 per cent of the companies interviewed reported increased sales on eco-labelled products[27]. Eco-labels may be used for other purposes, such as establishing a "green image". According to ECP, almost all licensees have renewed their licenses at the end of the three-year term. However, there are also examples of firms which have stopped using eco-labels[28].

D. Environmental effects on developing countries

1. Effects of eco-labelling programmes in developed countries

36. So far, firms in developing countries have not yet used the type-I eco-labels of the eco-labelling programmes in developed countries. Thus, eco-labelling programmes in developed countries have had no direct positive environmental effects on developing countries.

37. In theory, eco-labelling in OECD countries may have positive effects on the environment in developing countries, but such effects will likely be modest. Large firms in developing countries who possess the financial and technological means to invest in environmental improvements may be able to qualify for an eco-label and sell in premium markets. However, small and medium-sized firms tend to have more difficulties in obtaining information and in adjusting to eco-labelling criteria.

38. A key question is whether the required adjustments to qualify for an eco-label in export markets are also appropriate in the context of the economic, technological and environmental conditions in the producing country. Eco-labelling criteria which are objective, understandable and realistic are more likely to provide incentives to developing country producers to design and produce products which comply with these criteria.

2. Eco-labelling in developing countries

39. A number of developing countries and countries in transition have established national eco-labelling programmes (e.g. India, Republic of Korea and Singapore) or are in the process of doing so. As in the case of developed countries, the purpose of such programmes is to contribute to environmental

improvements by providing information to consumers and to encourage producers to shift to more environment-friendly production processes. Eco-labelling and the associated education process may contribute to heightened consumer awareness of environmental issues. However, since the domestic market for eco-labelled products tends to be small, the conservation of export markets and the improvement of export competitiveness are often among the key objectives. In order to be successful, eco-labelling programmes aim at some form of mutual recognition with similar programmes in OECD countries.

40. Experience shows that the establishment of eco-labelling programmes in developing countries may be particularly difficult. The challenge is to establish criteria which are significant and relevant in the context of local environmental and developmental conditions of the country of production, taking into account local bases of raw materials and technologies, while at the same time satisfying the high standards for acceptance in developed country markets. Normally, eco-labelling also requires government funding, at least at an initial stage, to support the selection of product categories, the establishment of eco-labelling criteria and for educational and promotional purposes. The above points to the need for technical assistance in capacity building.

III. DEVELOPMENTAL ASPECTS OF ECO-LABELLING

41. With regard to the developmental effects of eco-labelling, the major concern is that adverse effects of eco-labelling on the exports of developing countries are likely to have some negative impact on their development process.

A. The case of small firms

42. Various studies undertaken under UNCTAD's technical cooperation programme indicate that small and medium-sized enterprises (SMEs) tend to encounter particular difficulties in complying with environmental standards and regulations, including eco-labelling requirements. Some of the reasons are:

(a) SMEs may lack access to information, technologies and capital;

(b) economies of scale factors may render investments unprofitable for SMEs;

(c) small industrial sites may imply lack of space for certain environmental facilities, e.g. waste water treatment;

(d) SMEs may be unable to ensure that raw materials are produced in accordance with the eco-labelling criteria;

(e) SMEs lack the economic power to transfer (part of) the adjustment costs arising from the need to comply with criteria to their suppliers. For example, SMEs may find difficulties in acquiring the required chemicals and other materials at competitive prices;

(f) the relative costs of testing and verification, including plant inspection, may be particularly high for SMEs.

It thus follows that eco-labels in product categories which are to a large extent supplied by SMEs in developing countries are more likely than eco-labels in other product categories to require special attention because of the possible difficulties that producers in developing countries may encounter.

B. The case of least developed countries

43. In defining product categories and determining criteria for eco-labelling, special attention could be given to the possible effects of eco-labelling on the LDCs, in particular in the case of specific product categories which account for a significant share of LDCs' export earnings (for example, T-shirts, which have been earmarked for eco-labelling in the European Union, represent a significant share of total exports of Bangladesh, Maldives and Laos to the EU).

44. In some cases, eco-labelling, in conjunction with technical assistance and other support measures, may assist in establishing niche markets for products which are inherently environment-friendly and which are largely supplied by LDCs, such as jute. Furthermore, where developmental aspects could be used in conjunction with environmental factors as a basis for setting eco-labelling criteria, special consideration could be given to facilitating exports from LDCs.

C. Role of aid agencies

45. The role of aid agencies in the area of trade and environment, including eco-labelling was discussed in an OECD Workshop on Trade, Environment and Development Cooperation, organized by OECD's Development Co-operation Directorate (Paris, 28 October 1994). The summary report of the meeting stressed the role of aid agencies in providing technical assistance and training to strengthen the

capacities of developing countries to set their own standards, eco-labelling schemes, certification schemes, packaging, recycling and testing facilities[29].

46. The report also mentioned that aid agencies should explore the possibility of promoting mutual recognition. A report of OECD's Development Assistance Committee (DAC) recommended that aid agencies could play an important role in helping developing countries in exploiting markets for environment-friendly products, inter alia, by "developing and promoting eco-labelling schemes, encouraging consultations among producers, exporters, importers, and consumers on standards and criteria, supporting mutual recognition through better verification, certification and other quality control"[30].

IV. SECTORAL ISSUES

47. At the first session of the Working Group many delegates expressed an interest in examining the practical experience with eco-labelling on the basis of case studies. This Chapter provides a brief analysis of three product categories of export interest to developing countries. All three categories will be included in the eco-labelling programme of the European Union.

A. Pulp and paper

Box 2
Eco-labelling for paper products: some issues for developing countries

Due to favourable conditions of both climate and soil, the productivity of forests in Argentina and Chile is very high, both for pine wood (long fibres) as well as eucalyptus (short fibres).

Argentina's leading exporter of paper competes internationally on the basis of economies of scale and technology and, according to a case study on Argentina, is using best environmental practices. For example, the firm has reduced the environmental impacts of its effluent and improved its forest management in response to concerns expressed by foreign clients. Based on a technology developed within the firm, the bleaching process has been modified and the firm is now producing Totally Chlorine Free (TCF) paper.

A study undertaken by the German Development Institute (GDI) indicates that the pulp industry in Chile meets stringent international standards and exceeds domestic regulations, in particular with regard to chlorine-free bleaching, effluent treatment, water consumption, energy use and sustainable forest management. The GDI study notes that the Chilean pulp industry has nevertheless opted for a low profile policy in its public relations, rather than trying to take advantage of its achievements in terms of environmental management, and that the EU eco-label causes some disadvantages which are partially unjustified.

Brazil's pulp industry has achieved a high level of vertical integration and larger firms possess their own eucalyptus plantations. Fast growing eucalyptus plantations and mastery of forest management technologies provide Brazilian industry with an important comparative advantage. The supply of renewable energy resources and economies of scale also constitute comparative advantages.

The environmental effects of plantation forests depend e.g. on whether the plantations were established to replace natural forest or on degraded land and whether native or exotic species were used. In Argentina, experts recommended the establishment of plantation forests on marginal agricultural land also for economic reasons, in particular the availability of such land and the lower costs of land preparation in the areas concerned. In Chile, around 90 per cent of the wood processed or exported comes from plantation forests.

48. Almost all eco-labelling programmes have established criteria for eco-labels for various categories of paper and paper products. Criteria refer, for example, to recycled content of paper. Concerns about recycled content and PPM-related criteria have been expressed by exporters of paper as well as of pulp in both developing and developed countries. For example, producers of pulp in

Brazil, Canada and the United States have complained about certain draft criteria under the European Union eco-label for tissue products.

49. The draft criteria of the European Union eco-label on tissue products are almost exclusively PPM-related. Brazilian exporters have alleged that the emphasis on recycling in determining whether the criteria regarding the consumption of renewable resources are met discriminated against Brazilian producers who use wood from plantation forests for manufacture.[31] They also alleged that the criteria related to SO_2 emissions in the production process were of little or no relevance since acid rain was not a matter of concern in the location of production. They also alleged that calculations made to determine whether the criteria regarding the consumption of non-renewable energy resources are met de facto discriminate against Brazilian producers, who depend largely on hydro-electricity.[32] In addition, the system of "load points"[33] (to qualify for a label products should have not more than a stipulated number of load points) could allow paper mills to shift part of the costs of environmental adjustment to suppliers of pulp[34].

50. Only around 2 per cent of extra-EU imports of tissue products in 1992 originated in developing countries. With regard to pulp and paper products in general, 4.9 and 3.3 per cent of extra-EU imports originated in Brazil and Chile respectively.

B. Textiles and clothing

51. In recent years, a number of "private" eco-labels have emerged in the textiles and clothing sector, covering a range of articles. Examples are the German MUT (Markenzeichen Umweltschonenden Textilien - manufacturer's mark denoting environment-friendly textiles-, a process-related label), MST (Marke schadstoffgeprüfte Textilien -manufacturer's mark denoting textiles tested for harmful substances-, a product-related label) and ECO-TEX 100 labels.

52. Recently, draft criteria for eco-labels for T-shirts and bed linen have been developed for the European eco-labelling programme[35]. The draft criteria refer to environmental effects at different stages of the product's life-cycle, in particular those related to cotton growing and the manufacturing of fabrics. Consequently, most criteria are PPM-related, referring, for example, to efficiency in the use of energy and water, the treatment of waste water, cotton dust and noise. Specific criteria relate to the use of pesticides and chemicals in cotton growing or to the use of dyes or chemicals in the manufacturing process, in most cases to address local environmental effects at the location of production (a separate group of criteria has been developed regarding chemical residues in final products). Only a few criteria are clearly product-related.

53. A large part of consumption of textiles and clothing in the European Union is supplied by imports. As much as around 80 per cent of the value of EU imports of T-shirts and bed linen (excluding extra-EU trade) originates in developing countries. Consequently, many of the environmental effects meant to be addressed by the PPM-related criteria being developed under the European Union eco-labelling programme take place outside the European Union, principally in developing countries.

C. Footwear

54. In the Netherlands, the Stichting Miliekeur (SMK - Dutch Foundation for Eco-labelling) has developed a national eco-label for footwear, which became effective on 1 March 1994. The SMK has also been appointed as the "lead competent body" for establishing draft criteria for an European Union eco-label (the European Flower) for shoes. The determination of these draft criteria, however, is still under development[36].

55. Only some of the criteria developed by the SMK are product-related[37]. These

Box 3
Eco-labels for T-shirts and bed linen

In Brazil, the principal exporters of T-shirts and bed linen to the European Union are large firms in the State of Santa Catarina. Interviews with representatives of the five largest firms revealed that all of them were already making adjustments to comply with environmental requirements of European importers. For example, one firm, exporting bed linen, stated that fifty percent of its recent investments had been prompted by environmental requirements.

Four of the five companies interviewed had information on the European Union eco-labels from their European clients. These larger firms stated that they already complied with a number of the draft criteria for the EU labels for T-shirts and bed linen. Most of them, however, considered that it would be difficult to comply with some of the other criteria, in particular those limiting the use of pesticides and chemicals during cotton growing, and the waste water parameters. In Brazil the use of pesticides in cotton growing is low and cotton is almost completely harvested by hand. However, imports of cotton into Brazil are increasing rapidly and it is difficult for textile producers to certify that the cotton they buy is pesticide-free.

The Brazilian textile industry is very heterogeneous in terms of firm size, technology, and management. While larger firms which export to the European markets might be able to qualify for an eco-label, this would be much more difficult for smaller firms, especially when adjustments require investments and the renovation of machinery. In addition, while the negotiating strength of larger firms and their relationship with suppliers of chemicals permits them to acquire the required chemicals without significant additional costs, smaller firms would suffer significant cost increases on account of required input materials.

In India, the main exporters of T-shirts and bed linen are small firms. A case study on India indicates that cotton production and processing is mainly done by small farmers and cooperatives who are not aware of the eco-standards. Large firms may be reluctant to take the risk of backward integration because the market for raw cotton is controlled by the Government. Garment exporters are unable to implement eco-standards on the fabric manufacturers because a large proportion of the latter are located in the informal sector which sells largely in the domestic market.

The study also notes that niche markets for Indian eco-textiles is estimated to be only 20 to 25 per cent in Europe where higher prices could cover the adjustment costs. In the remaining market segments, which account for approximately 70 per cent of Indian exports to Europe, increased adjustment costs would largely have to be borne by producers.

include a long list of quality and performance ("functional") requirements, which are principally aimed at increasing the reparability and durability of shoes. One criterion refers to the "energy content" of shoes, aimed at reducing the consumption of energy and raw materials[38]. Other criteria, referring to materials, are clearly PPM-related. In the case of leather such criteria refer to chromium emissions into water, emission of organic solvents, treatment of waste water (via an individual or common biological water purification installation) and the "responsible" transport or re-use of waste leather. Similarly, PPM-related criteria have been set for cotton synthetic sole materials. It thus follows that the question of whether or not shoes comply with the eco-labelling criteria depends basically on the environmental quality of materials used, and many of

Box 4
Eco-labelling in footwear: possible effects on developing countries

Brazil, the world's fourth largest producer of footwear, exports almost two thirds of its production of leather shoes. Brazilian footwear producers are aware that compliance with eco-labelling criteria would require new forms of relationships with the leather sector. Major footwear producers have already tried to secure the supply of leather (unrelated to environmental factors) through vertical integration (purchase of tanneries and leather treatment plants) and increased imports from neighbouring countries, in particular Argentina and Uruguay. Many tanneries possess water treatment installations, but do not use them. One reason is that operational costs are relatively high, in particular for small and medium sized firms. There may also be problems involved in adequate disposal of liquid wastes and sludge.

Considerable efforts are being made in developing countries to reduce the environmental impacts of leather tanning. For example, the Government of India made effluent treatment a condition for issuing licences to new tanneries. Tanners in Argentina and India are becoming part of common effluent treatment (CET) plants, but are not sure whether the requirement that waste water be treated using a biological water purification would make their leather acceptable in the context of the SMK eco-label.

Interviews reveal that producers in developing countries perceive that incurring the additional costs associated with eco-labels would reduce the competitiveness of their products vis-a-vis other suppliers who focus their competitiveness on price, in particular suppliers from other developing countries. They also perceive that market conditions would not allow them to recover the additional costs associated with the required adjustments.

the corresponding criteria are PPM-related.

56. Domestic production of footwear in the Netherlands has been declining as imports have been increasing. Most footwear sold in the Netherlands -and in the European Union- is produced in third countries. In 1991, at least 91 per cent of all shoes sold in the Netherlands were imported (at least 84 per cent in the case of leather shoes and 97 percent in the case of footwear made from other materials). Developing countries accounted for 35 per cent of all imports and 82 percent of extra-EU imports in 1993, the principal developing country suppliers being China, Hong Kong, Brazil, the Republic of Korea and Indonesia). Moreover, domestic producers obtain a large share of their materials from imports. For some materials for which eco-labelling criteria have been established, such as cotton, there is no production in the Netherlands or elsewhere in the European Union (except Greece). Thus, most of the environmental effects which are addressed by the eco-labelling criteria developed by SMK are caused by production externalities outside the Netherlands, and to a large extent outside the European Union.

57. Some consideration has been given to the fact that conditions in third countries may differ from those in the Netherlands. For example, it was decided to exempt foreign producers from the requirement to process solid waste containing chrome (through recycling, deposit in a secure dumping site, or incineration whereby chrome is reclaimed) if such waste is not considered as chemical waste in the country of production.[39]

58. One factor of concern, in particular to producers in developing countries is the costs of testing and certification. These costs may be relatively high

for two reasons. First, since many exporters are SMEs, the costs of testing and verification tend to be high in relation to sales. Second, since a number of criteria refer to the materials used to produce footwear, both the shoes and the materials must be certified. The SMK prescribes different methods for assessing compliance with each criteria. The SMK requires product testing to assess compliance with the product-related (functional) criteria. The assessment of compliance with PPM-related criteria is normally based on declarations by producers plus the suppliers of materials.[40]

V. TAKING ACCOUNT OF DEVELOPING COUNTRIES' INTERESTS

59. At its first session, the Working Group recognized that transparency is a basic condition for taking into account the interest of developing countries in the elaboration of eco-labelling criteria. However, several delegations pointed out that improved transparency would not by itself be sufficient to reduce the potential adverse effects of eco-labelling.

A. Transparency

1. Concepts of transparency

60. There are different concepts of transparency. For example, while ex-ante notification would imply an "interactive" process wherein the party contemplating the environmental measure and the affected parties engage in a dialogue during the development of the measure, ex-post notification leads to "passive" availability of information through publication after the implementation of the measure.

61. Transparency provisions under WTO and under the TBT Agreement, such as publication, notification, right to comment, and obligation to take comments into account, have proven to be useful (in the context of technical standards and regulations). In accordance with Article 4.1 of the TBT Agreement, Governments shall take all reasonable measures to ensure that local government and non-governmental standardization bodies as well as regional standardization bodies accept and comply with the "Code of Good Practice for the Preparation, Adoption and Application of Standards". The TBT Agreement also recommends the establishment of "enquiry points" (Article 10).

62. There is growing consensus that eco-labelling requires a broader concept of transparency. For example, the draft ISO guiding principles (see below) reflect a broad concept of transparency implying, for example, the availability for inspection and commenting to interested parties of information on criteria, certification and award procedures, and periodic revision of criteria. Transparency also involves the participation of interested parties, including foreign producers, in the development of criteria and certification as well as early notification of concerned domestic and foreign producers about the product categories and criteria.

2. Transparency at different stages of the eco-labelling process.

Selection of new product categories

63. Transparency should cover the whole process of eco-labelling, including the selection of new product categories. Transparency would include consultations with potentially affected trading partners at the earliest possible stage. Where imports are significant, transparency may require consultations on the question of whether or not eco-labelling in a certain product category may potentially help to reduce environmental stress.

64. Transparency also requires publication of lists of product categories being considered for future eco-labelling. For example, in the European Union, the Commission "will publish periodically a list of products for which work is about to begin"[41].

Preparing draft criteria

65. In existing eco-labelling schemes, the selection of product categories, as well as the determination of draft criteria and limit values, is carried out by a Board or similar body. Currently, foreign producers do not participate in these bodies. There is growing recognition that, where relevant, foreign producers should be invited and allowed to be participants, with domestic producers, in the development of criteria for products of export interest to

them. This has also been discussed in ISO.

Consultations

66. Throughout the eco-labelling process, transparency can be increased through consultations. The working draft of ISO's guiding principles recommends the establishment of a formal consultation mechanism, at the earliest possible time (it is also recommended that the result of the consultation should be made public). In this context, the European Union has established a Consultation Forum.

The public review process

67. In most eco-labelling programmes, there is a public review process of draft criteria before final product criteria are published. Any interested party, including foreign producers, can take advantage of this process. Thus, transparency of existing eco-labelling programmes may not differ substantially from the transparency provisions of the TBT Agreement. However, the ability of foreign producers to participate in the review process depends on many factors, such as the timely dissemination of information on new product categories being selected for eco-labelling, the length of the review process and the ability to be physically present and to devote time to the process.

68. In this context it is worth noting that the TBT Code of Good Practice for the Preparation, Adoption and Application of Standards recommends the publication of a work programme (at least once every six months) containing the standards under preparation (and those which have been adopted in the preceding period).

Publication and dissemination of information

69. Transparency also involves the active dissemination of information on product categories for which eco-labelling has been established as well as on product criteria. At the multilateral level, ITC is planning to provide information to developing countries on trading opportunities for environment-friendly products, eco-labelling systems, criteria and procedures.

3. Market research and other supportive studies

70. Market research constitutes an important requirement of successful eco-labelling. An additional objective of market analysis could be to identify foreign suppliers who would need to be consulted or invited to participate in the determination of criteria in order to help avoid discrimination and to render eco-labelling more effective. The results of market analysis could thus provide guidance to the effective implementation of steps aimed at increasing the transparency of eco-labelling.

71. Analysing the main environmental impacts of a product at different stages of its life cycle and assessing the relevance and feasibility of setting criteria in each case involves supporting studies. Such studies assess whether or not eco-labelling in a certain product category may potentially help to reduce environmental stress by promoting the consumption and production of products meeting certain criteria. Given the complexity involved in the multi-criteria and life-cycle approach of eco-labelling, supporting studies tend to have a significant impact on the determination of draft criteria.

72. Supporting studies are often carried out on the basis of databases and other information available in the importing country or in countries with similar environmental and technological conditions, as well as inquiries among ministries and domestic industry. Where eco-labelling has potential effects on developing countries, the supporting studies could include a careful analysis of these impacts in order to render eco-labelling more objective and more effective in reducing environmental stress. Market research is also important in this context. In certain cases supportive studies could be carried out in cooperation with

research institutes in the country of production.

4. Parameters for increased transparency

73. At its first session, the Working Group felt that it might be useful to target product categories of significant export interest to developing countries with a view to encouraging their active participation in the determination of criteria for such categories. The Working Group may wish to discuss whether it would be possible to establish parameters which could assist eco-labelling bodies in identifying such product categories, for example on the basis of market shares or import shares.

74. The preferred parameters would probably be actual and potential market shares. Since systematic data on market shares are not readily available, the market research carried out as part of eco-labelling process (see above) would have a particularly important role to play. Data on import shares are more readily available.

75. An analysis on the European Union, based on 1992 data, shows that in the case of 445 out of 734 groups of industrial consumer products at the six-digit HS level, more than half of the value of imports (excluding intra-EU trade) originated in developing countries and China.[42]

76. Parameters based on import shares tend to ignore the export interests of smaller trading partners. Thus, export shares may be more appropriate as a basis for identifying product categories of trade interest to smaller exporters, in particular the LDCs. A formula proposed at Marrakesh, in the context of tariff negotiations, identifies smaller trading partners with substantial trading interests in a particular product by calculating, for each tariff item, the imports originating in a specific country as a percentage of all imports originating in that country.[43] This formula identifies the trading partners whose export earnings depend significantly on the product concerned.[44]

77. Parameters based on market or trade shares of the product categories selected for eco-labels may be insufficient to identify the relevant trading partners. As mentioned in Chapter III, when LCA is used, the question of whether a product qualifies for a label may depend to a large extent on the materials used, for example, pulp (for tissue products), cotton (for T-shirts and bed linen), and leather (for shoes). The question is then whether, in addition to the manufacturers of the product categories subject to eco-labelling, the principal suppliers of materials should also be involved in the process of establishing criteria.

B. Guiding principles

78. The ISO, through Sub-committee 3 of Technical Committee 207 (207/SC3), is preparing three international standards on environmental labelling, one of which deals specifically with type-I eco-labelling. The standard on type-I -consisting of guiding principles- is intended to provide practitioners and interested parties with a reference document which helps them to ensure the credibility and non-discriminatory nature of eco-labelling programmes. The February 1995 draft consists of three main sections: (1) Guiding principles and practices; (2) Procedures for setting criteria; and (3) Guide for certification procedures. Another working group is preparing a document "Goal and Principles of All Environmental Labelling", containing a number of principles which are relevant for all types of environmental labelling.

79. The draft text recognizes that eco-labelling may constitute a barrier to trade. It makes a number of recommendations to prevent restrictions to trade, for example with regard to the definition of product categories, the determination of criteria - which have to avoid the exclusion of product and processes regarded as environmentally acceptable in the producing country -

certification procedures and transparency, including the participation of foreign producers in the development of criteria. Some reference is also made to the PPMs issue.

80. At the time of writing (March 1995), the ISO standard on Eco-labelling (CD 14024) is being voted on at the sub-committee level and it is expected that the committee phase of its development will be completed in late June 1995. The draft will then need to be submitted for a six-month vote by the full ISO membership before it is approved as an International Standard. The timing of the resolution of these votes is difficult to predict, but the earliest date for publication would be in the first half of 1996. Member countries will then decide whether or not to include the standard in their national legislation[45].

C. Dealing with PPM-related criteria

81. The application of PPM-related criteria to imported products tends to pose a number of problems, in particular when such products originate in countries where environmental and developmental conditions are significantly different from those in the importing country. Not all eco-labelling programmes use PPM-related criteria. If such criteria are used, a number of options could be considered to avoid or mitigate adverse effects on trading partners.

1. Exemptions

82. When eco-labelling criteria address intrinsically local environmental problems, it may at times be desirable to exempt foreign producers from the requirement to comply with specific process-related criteria (see the example of chrome waste treatment for footwear in the Netherlands). Exemptions may be desirable, for example, when the environmental problems addressed are insignificant in the context of the local conditions in the producing country. For example, eco-labelling requirements concerning SO_2 emissions would impose extra costs on producers in countries where such emissions are not a matter of concern. Disadvantages of outright exemptions could be that the credibility of eco-labelling might be questioned by consumers and environmental groups and that producers in the importing country might allege that a competitive advantage is provided to foreign producers. These disadvantages, however, need not be more relevant than is the reverse discrimination when the importing country's criteria are imposed on the exporter[46].

2. Compliance with local environmental regulations

83. A general requirement[47] of most eco-labelling programmes is that a product must comply with all relevant environmental regulations. Some eco-labelling programmes recognize that foreign producers should not be required to comply with PPM-based regulations in the importing country. For example, the Environmental Choice Programme (ECP) of Canada includes compliance with "all applicable governmental and industrial safety and performance standards" (including environmental) under its general requirements, but it is understood that imported products should meet the local PPM-related standards in the country of production, not the Canadian regulatory process standards.

84. With regard to specific criteria for certain product categories, however, PPM-related criteria (which are used in some programmes) tend to be applied in a uniform way to domestically produced and imported products. Such criteria are often set at limit values that go beyond regulatory requirements in the importing country. It may nevertheless be possible to limit the requirements for products originating in developing countries to compliance with existing regulations in the country of production. It is to be noted that environmental regulations in developing countries are often based on standards which are similar to those used in developed countries, but enforcement may be more difficult. It may be unrealistic to require firms in developing countries, in particular SMEs, to go beyond regulatory requirements in order to qualify for an eco-label in an

external market. Eco-labelling could, however, perform a useful function if it provides incentives to comply with existing environmental standards.

3. The "cradle-to-export border" approach

85. In report TD/B/WG.6/2 it was suggested that the life-cycle analysis of a product could be split into two stages: "cradle-to-export border", and "import-border to grave". While eco-labelling criteria for the import-border to grave stage would be based on the priorities of the importing country, the criteria developed for the cradle-to-export border stage could be set in accordance with the environmental conditions and priorities of the producing/exporting country.

86. Another approach would be to exercise special care when designing PPM-related requirements in areas where imports are predominant[48]. Thus, PPM-related requirements and limit values for product categories which include significant imports, in particular from developing countries, would be avoided or designed in such a way that adverse effects on producing countries are avoided.

D. Equivalency

87. The concept of equivalency is set out in report TD/B/WG.6/2 (paragraphs 58-64). In the present report, it has been stressed that in order for eco-labels to provide relevant information to consumers and have the potential to contribute to the reduction of environmental stress, PPM-related criteria must be appropriate in the context of local environmental conditions in the country of production. The concept of equivalency could take account of comparable environmental objectives, different ways of achieving them, and differences in environmental and developmental conditions across countries[49]. In the context of ISO's Working Group which is preparing the draft "Goal and Principles of All Environmental Labelling" (see above), the recognition of environmental improvements in different countries as potentially equivalent, based on their overall purpose and significance, has also been discussed.

E. Mutual recognition

88. At its first session, the Group agreed that mutual recognition should be examined closely. Mutual recognition of eco-labels would be a desirable objective to render trade and environment interests compatible. ISO's Working Group mentioned in paragraph 87 has also discuused mutual recognition among environmental labelling programmes based on equivalency of procedures and objectives.

89. The rationale for mutual recognition is set out in report TD/B/WG.6/2 (paragraphs 65-73). Mutual recognition in the context of eco-labelling generally would imply that, if certain conditions are met, qualification for the eco-label used of the exporting country is accepted as a basis for awarding the eco-label used in the importing country (mutual recognition would normally apply to identical or similar product categories). At the first session of the working group, frequent reference was made to a proposal whereby the eco-labelling programme of the importing country would agree to award its own eco-label to products which met the process-related criteria of the exporting country, and the use and disposal criteria of the importing country.

90. Mutual recognition is of key interest to developing countries and an important long-term objective in establishing eco-labelling programmes in some of these countries. Mutual recognition, however, does not serve only trade interests. The analysis presented in Chapter II above, however, indicates that mutual recognition appears to be a basic condition for eco-labelling to have any significant positive environmental effects on developing countries.

VI. Technical assistance

91. Technical assistance and capacity-building efforts in the area of eco-labelling and certification may help in reducing the potential negative effects of eco-labelling on developing countries and may assist producers in taking advantage of trading opportunities that may arise for environment-friendly products. Technical assistance in capacity-building could also be useful in supporting developing countries wishing to establish their own eco-labelling programmes and in promoting mutual recognition of eco-labelling programmes. Technical assistance is further needed to facilitate the effective participation of developing countries in future international deliberations on eco-labelling, in particular in ISO. Furthermore, the establishment in developing countries and countries in transition of standardization bodies -or training of existing bodies- to conduct testing and certification in the producing country could reduce associated costs.

92. In addition, developing countries may require technical assistance and capacity building to take advantage of existing transparency provisions in eco-labelling programmes in their export markets as well as of any improved transparency which may result from ISO's guiding principles currently being developed and from the suggestions made in this report (in particular the involvement of developing countries in the process of determining criteria for products of export interest to them).

93. ISO's technical assistance activities support developing countries in a number of ways, in particular with regard to their effective participation in ISO's standard-setting.[50]

94. As part of its overall programme on environment-related trade promotion in developing countries, the International Trade Centre (ITC) has initiated a programme of work on eco-labelling, focusing on promotional and operational activities, and to assist developing country producers to seize trading opportunities provided by eco-labelling in their target markets. ITC is also considering providing assistance to institutions, associations and enterprises in developing countries in establishing company-level labels or national-level eco-labelling schemes.

95. UNCTAD's technical cooperation projects have focused on policy-oriented research on the possible effects of eco-labelling on developing countries, as well as on conceptual work on possible ways and means to increase the compatibility between the environmental objectives of eco-labelling and the trade and sustainable development interests of developing countries. A technical cooperation project on "eco-labelling and international trade", funded by IDRC has now been completed.[51] UNCTAD continues to cooperate with other international organizations, including UNEP and ITC.

96. Practitioners in OECD countries often provide technical assistance to developing countries and countries in transition with a view to assisting them in setting up eco-labelling programmes.

VII. CONCLUSIONS AND RECOMMENDATIONS

97. While eco-labelling is primarily aimed at environmental objectives, it has the potential to discriminate against foreign producers, in particular when it involves products imported from countries where environmental and developmental conditions are substantially different from those in the importing country. There is particular concern that importing countries unilaterally determine criteria on production processes for products which are principally produced in developing countries. In addition, it can be argued that if the objective is to provide information to the consumer, then the consumer is better served if PPM-related information relates as closely as possible to environmental improvements in the country of production.

98. ISO has progressed considerably in preparing draft guiding principles for eco-labelling, aimed at contributing to the credibility of eco-labelling programmes and at helping to avoid discrimination. These guiding principles are expected to make significant contributions, in particular with regard to transparency. Eco-labelling, however, continues to cause concern, in particular to developing countries. A number of issues still need to be resolved:

- the relationship between eco-labelling and the provisions of the multilateral trading system, in particular the Agreement on Technical Barriers to Trade (an issue included in the terms of reference of the WTO Committee on Trade and Environment);

- the transaction costs that may arise from the proliferation of different eco-labelling schemes;

- the PPM-issue;

- the need for mutual recognition in order to render eco-labelling more effective, in particular for developing countries;

99. Despite growing consensus that eco-labelling programmes which opt for using PPM-related criteria may have to allow differences in such criteria in accordance with the local environmental and developmental conditions in the country of production, little or no progress has been made in implementing solutions for the problems that may arise when PPM-related criteria are applied to imported products. It is doubtful that transparency alone would be able to avoid the discrimination that may arise from the use of specific PPM-related criteria which are incompatible with the environmental and developmental conditions and problems of third countries.

100. Eco-labelling agencies may wish to analyse carefully the actual and potential market and trade shares of developing countries in new product categories being considered for eco-labelling. Where such shares are significant, consultations could be held with producing countries with a view to assessing the potential trade, environmental and developmental effects on developing countries. Such assessment can be useful in making an analysis of the cost and benefits of eco-labelling in specific product categories. It may be preferable to avoid the use of PPM-related criteria, in particular for product categories which are predominantly supplied by developing countries. Alternatively, PPM-related criteria could be set in accordance with the environmental and developmental conditions of the country of production.

101. A number of developing countries are initiating eco-labelling programmes. Since the demand for eco-labelled products in developing countries tends to be small, eco-labelling in these countries generally will have significant environmental effects only if it allows firms that qualify for the label to increase sales in external markets. Mutual recognition is of key importance to developing countries. The contribution that eco-labelling can make to reducing environmental stress in developing countries depends on whether or not a significant market for eco-labelled products can be created for developing-

country producers. Trade has an important role to play in this context. Further efforts to strengthen international cooperation in the field of eco-labelling should focus on creating reasonable prospects for mutual recognition of eco-labelling programmes.

Endnotes

1. UNCTAD, "Eco-labelling and market opportunities for environmentally friendly products", TD/B/WG.6/2, Geneva, 6 October 1994. In addition, the secretariat submitted the following two reports: "UNCTAD's technical cooperation programme on trade and environment", TD/B/WG.6/MISC.1, Geneva, 21 November 1994 and "Report on the workshop on eco-labelling and international trade", TD/B/WG.6/MISC.2, Geneva, 21 November 1994.

2. See TD/B/WG.6/2, box 1. Currently there are about 20 type-I eco-labelling programmes (TD/B/WG.6/2, box 2).

3. TD/B/40(1)/6

4. Chudnovsky,D., G. Lugones and M. Chidiak, 1995, Comercio International y Medio Ambiente: el Caso Argentino, study prepared under the joint UNCTAD/UNEP project on Capacity-building on Trade and Environment. The study was also funded by project ARG/90/014, Ministerio de Relaciones Exteriores, Comercio Internacional y Culto.

5. The statistical and information annex is being issued as TD/B/WG.6/Misc.3 (English only).

6. An example would be to place a requirement on SO_2 emissions in the production process. In a country where such emissions are not a matter of concern (the levels may be very low relative to assimilative capacity) the eco-labelling requirement would impose extra costs.

7. For example, requirements in the European Union may refer to sulphur dioxide and nitrogen oxides. Since such pollutants are important in the European Union, technologies have been developed. In developing countries where these pollutants are less important technologies have not been developed. An eco-label would thus make it necessary to import such technologies. A. Markandya, op. cit.

8. Differences in environmental infrastructures across countries have a large impact on valuations of what is a "cleaner product". For example, if municipal waste water treatment plants already have phosphorus cleaning, as in Denmark, the use of phosphorus would be preferred to other calcium binding substances. Another example refers to fly-ash. A number of countries have built up infrastructure to allow to use fly-ash as a raw material in the cement industry (In Denmark, practically all fly-ash is used in cement production). Thus, certain activities leading to fly-ash, such as burning of coal, are valued differently as compared to other countries. See Helle Petersen, A possible (international) implementation strategy for product oriented environmental policy measures, in International Workshop on Product Oriented Environmental Policy, Workshop Proceedings, The Hague, the Netherlands, September 30th- October 1st, 1993.

9. Paragraph 4.8(b).

10. The Netherlands' Ministry of Housing, Physical Planning and Environment (VROM), Nota Product and Milieu, The Hague, December 1993.

11. Porter, M.E. and C. van der Linde, 1994. Towards a New Conception of the Environment-Competitiveness Relationship.

12. F.H. Oosterhuis and Y.T.M. van Scheppingen, Inventory of product policy instruments. Case study: the Netherlands. Institute for Environmental Studies, Free University, Amsterdam, November 1993.

13. See Hartwell R.V. and L. Bergkamp, "Eco-labelling in Europe: New Market-Related Environmental Risks?" BNA International Environmental Daily, Oct. 20, 1992. in Porter E. and C. van der Linde, Towards a New Conception of the Environment-Competitiveness Relationship, March 1994.

14. Frieder Rubik, Product policy in support of environmental policy. Case study Germany. Institut für ökologische Wirtschaftsforschung. September 1993

15. The establishment of eco-labelling criteria, in particular with regard to PPMs, which are incompatible with the environmental and developmental conditions and problems of third countries could lead to discrimination. See Imme Scholz, et.al., op. cit.

16. Moreover, even though consumers may care about environmental impacts in other parts of the world, they need not treat environmental impacts in the country where they reside as the same as impacts caused in other countries. Hence it would be inappropriate to require the same emission standards or the same weights for foreign producers as for domestic producers if the objective is to inform domestic consumers about the environmental consequences of a product. See: A. Markandya, "Eco-labelling: An introduction and a review", February 1995.

17. Verbruggen, H., 1994, Changing North-South Comparative Advantages and the Role of Development Co-operation, paper presented at the OECD Workshop on Trade, Environment, and Development Co-operation, Paris, 28 October 1994.

18. De Motta Veiga, P., M. Reis Castilho and G. Ferraz Filho, 1994, Relationships between Trade and the Environment: the Brazilian Case, Study carried out under the joint UNCTAD/UNDP project on "Reconciliation of Environmental and Trade Policies".

19. Rachel Crossley, C.A. Primo Braga and P.N. Varangis, Is there a commercial case for tropical timber certification?, Paper presented to the UNCTAD Workshop on Eco-labelling and International Trade. Geneva, 28-29 June 1994.

20. Anniken Enger, Randi Lavik, Pal Strandbakken and Eivind Sto, "The White Swan in Norway: Knowledge of and Trust in Eco-labelling". Paper presented at the international Conference on Sustainable Consumption, Lillehammer, Norway, February 12-14, 1995.

21. According to one source, the German Government seems to require many public procurement and institutional purchasing programmes to consider only products that have been awarded the Blue Angel eco-label. See Hartwell and Bergkamp, op. cit quoted in Porter, E. and C van der Linde, op. cit.

22. At the recent Oslo Roundtable on Sustainable Production and Consumption (6-10 February 1995), the use by governments and business of environmental strategies for procurement was identified as one of six "priority areas".

23. Maria Isolda Guevara, Ramesh Chaitoo; Murray Smith, Canada's Environmental Choice Programme and its Impact on Developing Country Trade, paper Presented to the UNCTAD Workshop on Eco-labelling and International trade, Geneva, 28-29 June 1994.

24. ECP hopes to expand the number of product categories for which eco-labels will be operative by 60 new categories. As part of its plan, ECP is putting more emphasis on market orientation, public awareness building (e.g. through cooperation with licensees in the fields of advertising and marketing) and new approaches to eco-labelling criteria. For example, a study has been commissioned to identify and prioritize possible product and service categories, based on the estimated environmental benefits of their inclusion in the programme, their sales

volumes (considering both household expenditure and government procurement) and possible industry response.

25. In both programmes product-specific award criteria tend to focus on the use and disposal stages of the product's life cycle (see TD/B/WG.6/2, Box 4).

26. Guevara, Chaitoo, Smith, op. cit.

27. The Singapore Green Labelling Scheme, 1994

28. For example, in Germany Coca-Cola Company stopped using the Blue Angel label for refillable PET bottles as it appeared to have lost its marketing effectiveness. See IOW, op. cit.

29. OECD, Workshop on Trade, Environment and Development Co-operation, 28 October 1994. Summary Report. OECD/GD(95)10, p.10

30. OECD, Development Assistance Committee, "Trade, Environment and Development Co-operation", OCDE/GD(95)7, Paris 1995.

31. Fundaçao Centro de Estudos do Comercio Exterior, "Eco-labelling schemes in the European Union and their impacts on Brazilian Exports". Paper presented to the UNCTAD Workshop on Eco-labelling and International Trade. Geneva, 28-29 June 1994.

32. See TD/B/WG.6/2, paragraph 33.

33. To qualify for an eco-label, products should not have more than a stipulated number of load points or "penalties" which are given on the basis of specific parameters.

34. Imme Scholz, Karola Block, Karen Feil, Martin Krause, Karolin Nakonz, Cristoph Oberle, "Medio ambiente y competitividad: El caso del sector exportador chileno". Instituto Aleman de Desarrollo (German Development Institute), Berlin 1994.

35. By February 1995 the study on textiles had reached Procedural Step V of the "Procedural Guidelines for the establishment of product groups and ecological criteria". Therefore the draft proposal had yet to be sent to DG XI of the European Commission.

36. SMK has forwarded its proposal to the European Union for discussion among the competent bodies.

37. Draft criteria on Pentha-Chloro-Phenol (PCP) content of leather, which would limit PCP content in leather to a maximum of 100 ppm, have been dropped since more stringent mandatory standards, establishing a maximum PCP content of only 5 ppm) have now been introduced.

38. The "energy content" of footwear is calculated on the basis of the volume of different materials used in a pair of shoes and a list of coefficients expressing for each material "the energy of raw materials plus the energy used in processing". This method does not take account of the actual amount of energy consumed in different countries. Thus, comparative advantages derived from using sunlight in the drying process (the case of India) or hydro-electricity (the case of Brazil) are not taken into account

39. However, the requirement that waste water be dumped via a biological water purification may be difficult to comply with for foreign producers using other systems. With regard to a criterion on chrome (Cr) emissions (concentration of chrome in waste water), the corresponding limit value is derived from existing

legislation in the Netherlands.

40. Such declarations refer to a technical dossier containing information which the manufacturer uses to prove to a certification institution that he has met the stated requirements, such as the specification of materials, laboratory research (preferably conducted by a third party), and certificates from suppliers. Whether or not on-site inspection is necessary is left to the discretion of the certification institution. If plant inspection were required, it might be necessary to visit at least two companies: the shoe factory and the leather tannery.

41. European Commission, Commission Information on Eco-labelling. Procedural Guidelines for the establishment of product groups and ecological criteria. Paragraph V.8.

42. Since agricultural products as well as raw materials, intermediate and capital goods normally are not earmarked for eco-labelling, the analysis undertaken by the UNCTAD secretariat is based on non-agricultural (i.e. industrial) consumer goods only. A total of 734 product groups at the 6-digit HS level were classified as consumer products (developing countries and China accounted for 50.1 per cent of all extra-EU imports of industrial consumer goods). In the case of 445 products, 50 per cent or more of the value of extra-EU imports originated in developing countries or China. Examples are (in brackets the principal suppliers at the six-digit HS level): leather articles (China), carpets (Iran and India), tableware and kitchenware (Republic of Korea, China and India), textiles and clothing (Turkey, Indonesia, Thailand, Hong Kong, Taiwan Province of China, Morocco, China, Republic of Korea, Egypt, Cyprus, Pakistan and Malaysia), footwear (China and Republic of Korea), jewellery (Thailand and Hong Kong), cooking appliances (Taiwan Province of China), table knives (Republic of Korea), razor blades (Argentina), sewing machines (Taiwan Province of China), electro-mechanical and electro-thermic domestic appliances (China), hair dryers (China), smoothing irons (Singapore), microwave ovens (Republic of Korea), cassette players (China), radios (China), TV receivers (Thailand and Taiwan Province of China), motorcycles (Taiwan Province of China), bicycles (Taiwan Province of China), clocks and watches (China and Taiwan Province of China), sleeping bags (China), toys (China and Taiwan Province of China), tennis and other balls (Indonesia or Pakistan), ice and roller skates (China), fishing rods and reels (Republic of Korea), cigarette and other lighters (Mexico), and combs (Taiwan Province of China).

43. Understanding of the interpretation of Article XXVIII of the General Agreement on Tariffs and Trade 1994.

44. An application of this formula to extra-EU imports (but excluding trade flows of less than US$ 500,000) indicates that certain textiles categories represent significant export interest for LDCs. For example, woollen carpets represent 87 and 32 percent of Nepal's and Afghanistan's exports to the EU respectively. T-shirts represent significant export interests for Maldives (18.7 percent), Laos (14.5 percent) and Bangladesh (11.7 percent or US$ 113.6 million).

45. The following countries have requested to participate in the work of the ISO Sub-committee on eco-labelling: Australia, Austria, Belgium, Brazil, Canada, Colombia, Czech Republic, Denmark, Finland, France, Germany, India, Ireland, Japan, the Republic of Korea, Malaysia, Netherlands, New Zealand, Russian Federation, South Africa, Spain, Sweden, Switzerland, Tanzania, Thailand, Trinidad and Tobago, Turkey, United Kingdom, Uruguay, United States. However, among developing countries only the Republic of Korea, Malaysia and South Africa have nominated experts to participate in the discussions. The UNCTAD secretariat has been participating as liaison organization in the work of TC 207/SC 3 and has provided relevant inputs, for example on the international trade aspects of environmental labelling.

46. A. Markandya, op. cit.

47. The requirements for awarding an eco-label are normally divided into:
- general requirements which apply to all products and set general condition for awarding the label; and
- product criteria, which set technical requirements applicable to a specific product category.

48. Environmental Choice Program, Environment Canada, "Eco-labelling and PPMs, The international Context". Paper presented to the OECD Workshop on Eco-labelling and Trade. London, 6 and 7 October, 1994.

49. At the first session of the working group, some delegations stressed that UNEP should pursue studies to determine a basis for establishing environmental equivalency.

50. The effective participation by developing countries in the meetings of ISO technical committees and sub-committees has increased slowly over the years, but has still not reached the level expected. ISO awards travel and subsistence grants to some countries for participating in one or two meetings, with the hope that this will act as a catalyst to generate wider participation of developing countries in ISO's activities.

51. The papers presented to the Workshop on Eco-labelling and Trade are being published in book form.